

Prospectus for Research Interns



Marine Research Internships

A unique programme at the tip of Africa offering multiple marine species in a single area



Marine Dynamics | Shark Tours





Great White Sharks

What we offer

The only programme for research interns working in this unique marine environment at the tip of Africa where the Atlantic and Indian oceans meet.

With mentors from our resident international team of marine biologists, interns have access to a wide spectrum of marine species.

All of these species are easily accessible for boat-based research from our four vessels.



Southern Right Whales
(from July-December)



Whale Whisperer which offers interactions with the Southern Right Whales (July-December) that breed and calve in our waters as well as all year tours to important resident colonies of seals and seabirds including African Penguins



Cape Fur Seals



Shark Fever the shark cage diving boat which interacts with thousands of Great White Sharks all year



Dolphins



Lwazi our new, dedicated research boat from which our team of marine biologists conducts world-class research programmes including shark tagging



African Penguins



Seabirds



Calypso our twelve seater rubber duck built for speed is ideal for exploring the coastline

About our marine environment

Situated near Cape Agulhas, the southern tip of Africa, Klein Bay is an extraordinary marine environment.

At the centre of the Bay, Dyer Island is the home of about 60,000 Cape Fur Seals attracting one of the densest and most accessible populations of Great White Sharks in the world. The clear waters and relatively small area make shark sightings a daily occurrence throughout the year with a peak in the Southern Hemisphere winter (May-September). Despite their large numbers and the frequent sightings, little research has been conducted on this Great White Shark population. The Dyer Island Conservation Trust is filling this knowledge gap with an intensive programme of research conducted from the cage diving boat – ***Shark Fever*** and the Trust's dedicated research boat, ***Lwazi*** (Xhosa for "seeking knowledge") from which our marine biologists study important aspects of shark behaviour. Our work has been presented at international conferences.



The Bay is also a vitally important breeding area for endangered Southern Right Whales which migrate from their feeding grounds in Antarctica to mate and breed here from July-December. About 800 adult whales are seen annually. Fortunately, boat-based access to these animals is strictly controlled with only a limited number of licences being given to responsible tour operators. Our eco-tourism partner, Dyer Island Cruises, offers some of the best boat-based whale watching in the world.



In addition to Southern Right Whales there are resident populations of Humpback and Bryde's Whales as well as large pods of Bottlenose and Common dolphins.

Dyer Island has one of the few remaining breeding colonies of the vulnerable African Penguin around the coast of the Cape. The habitat of these charming birds was largely destroyed in the 19th and early 20th centuries when guano was stripped from the islands thus removing the soft ground into which the penguins could burrow. As a result, eggs and chicks are now exposed to predators and the elements. Together with overfishing and marine pollution, this has caused the population to fall by 90% in the last 100 years and it is now at an all-time low.



With financial and logistical support from Marine Dynamics Tours and Dyer Island Cruises, the Dyer Island Conservation Trust pioneered the Faces-of-Need Programme of research and conservation. Using specially designed nests, the Trust has now provided >1000 houses for breeding penguins on islands and shore-based colonies around the Cape.

To fully understand the richness of this marine environment and our conservation projects visit www.dict.org.za

About the Trust

The Dyer Island Conservation Trust is a registered charity working to protect and conduct research in this unique marine environment.

Currently, our research programme into Great White Sharks includes studies of:

- Population dynamics within the area and the effect of changes in the marine environment throughout the year
- Feeding habits
- Comparisons between the habits of the Great White Sharks in the Atlantic area of Klein Bay and those in the Indian Ocean near Mossel Bay
- Interactions between Great White Sharks and the breeding population of diverse cetaceans.

This research is being conducted together with university departments and institutes in South Africa including the Universities of Cape Town, Pretoria and the North West. We work closely with scientists from Oceans and Coasts, the government's national co-ordinating coastal management agency.

Additional research programmes are being initiated as funds become available.



Identification of dorsal fins of Great White Sharks

The Trust and its eco-tourism partner, Marine Dynamics Tours, has developed a unique photographic record of thousands of dorsal fins of Great White Sharks allowing the identification of individual animals. This will now be incorporated in the worldwide database being developed by Bristol University, UK.

Further on-going research projects include the tagging of African Penguins to study their feeding habits and ranges as well as studies looking at their breeding habits. These results are being used to inform decisions about the development of marine protection areas. We assist with other studies on the large colony of Cape Fur Seals; the Southern Right whale and the dolphin population.

We also provide a rescue service for birds, seals and marine animals in the area.



Tagging of African Penguins (above) and (below), sea rescue of birds, seals and marine animals in the area



Objectives of Research Internship programme

The unique programme developed by the Trust with Marine Dynamics Tours offers the opportunity to combine practical boat- and shore-based research experience with scientific learning monitored by our full-time marine biologists. This allows the strictly limited number of Research Interns to maximise the value of their time spent on the programme. Wherever possible each Intern's personal research goals are accommodated within the programme.



Research Interns

Duration and time of stay

Research Interns are expected to stay for a minimum of four (4) weeks. Experience shows that a shorter duration offers insufficient value.

All Intern programmes will commence on the 1st day of each month.

Great White Sharks are seen throughout the year but they tend to be more active during the winter months from May to September.

Southern Right Whales arrive from their Antarctic feeding grounds in July and generally depart in December.

Seals, seabirds and dolphins are resident throughout the year.

Practical experience

During the internship you can expect:

- Experience at sea, on research and eco-tourism boats
- Photographing dorsal ID's and observing behaviour
- Identification of individual animals through newly discovered dorsal fin recording, measurement and markings
- Where possible, tagging of sharks from a research vessel.

Note: Tagging will be done by a professional but interns will be fully involved in the methods used to attract the sharks

- Manual tracking of sharks over several days
- Boat safety and seamanship – learning how to maintain standards and equipment needed for the operation as well as basic skippering experience

- Monitoring of other marine animals in the area, and learning about hierarchy in the ecosystems
- Participating in animal rescue when required

Learning opportunities

Research Interns have mentored learning about:

- Shark behaviour and biology in lectures and demonstrations such as dissections
- Assessing and recording animal behaviour
- Learning about climatic conditions and seamanship
- Recoding environmental conditions
- The history of shark behaviour
- Photographing and documenting marine wildlife
- Ocean conservation

Your time at sea

Every effort will be made to maximise your time at sea collecting data and conducting research from **Lwazi** and the two other vessels of our eco-tourism partners including:

Tracking White Sharks

24-hour tracking shifts follow sharks for as many days as conditions allow and data collection requires. Tracking needs you to spend a night at sea as shifts are rotated between crews. As part of a tracking team you will handle the VR100 and directional hydrophone (the equipment that picks up and processes the signal from the tagged



Conducting research from Lwazi (above) and cage diving (below) is a vital aspect of white shark conservation



sharks) as well as controlling the boat (while overseen by the skipper). Tracking of sharks is a unique experience allowing you to follow the shark as it patrols, rests and, most excitingly, as it hunts.

Note: Participation in tagging and tracking cannot be guaranteed as this is dependent on various factors

Cage Diving

Cage diving is a vital aspect of white shark conservation when professionally conducted under guidance from marine biologists. Responsible cage diving minimizes the impact on the shark's behaviour and promotes their conservation. From this experience you will help our international guests learn about white sharks in their natural environment. As a crew member you will be expected to assist clients into wetsuits, explaining the methods of cage diving as well as chumming and decoy handling. You will also log each shark and record behaviour as well as photographing dorsal fins and other identifying characteristics such as scarring.

'Chum Trips'

Chum trips assess populations of sharks by bringing them close to the boat. The methods involved are the same as those employed by cage diving vessels. By attracting sharks we collect dorsal fin IDs, and tag sharks with acoustic transmitters. During chum trips aboard a research vessel your tasks will include chumming (being in charge of the fish oils used to attract white sharks), photo identification, data collection, bait handling and decoy handling.

Other work at sea

Opportunities will arise to work with the other marine life including whales, dolphins, African Penguins, Cape Fur Seals and numerous sea birds.

Land-based duties

At the end of a day's field research you will electronically capture data. Interns also play a part in the day-to-day upkeep of records and write blogs.

The research team is always available to discuss collaborations on projects and publications.

Leisure time

Our Research Intern programme is not a holiday. It is designed to provide you with the opportunity to gain as much experience and knowledge as possible from your time with us.

The nature of the sea requires maximum flexibility in scheduling.

On "no-sea days" the diverse local environment offers opportunities for field trips to nature reserves, research centres and interaction with local research organisations.

Additionally, there is a vibrant social life and opportunities for tourism to local seaside vacation centres. Cape Town is about 2½ hours away by road.

Requirements for entering into the programme

Previous research experience or academic study is usual for individuals entering the programme. Preference will be given to those who possess a science background and have related experience, but it is not a requirement for application.

Most Interns are currently enrolled or have graduated from undergraduate or graduate research programmes in biological or environmental sciences.

However, we welcome applications from non-graduates who wish to develop their interest in the marine environment and its conservation.

Please note: This programme is for enthusiasts committed to our ideals and, while a really wonderful experience, is not for individuals seeking a holiday.

Accommodation and your stay

You will be situated in Gansbaai – known as the “White Shark Capital of the World.” This is a small town which offers a wide range of services including well-stocked supermarkets, banks, etc.

Gansbaai is about 30 minutes by road from the larger town of Hermanus which is an important tourist centre and about 2 hours drive from Cape Town. The surrounding area offers easy access to the Cape fynbos – one of the world’s most diverse eco-systems – and a number of tourist attractions and activities.

Accommodation is provided in a large, comfortable house close to our headquarters at the Great White House from which tours leave and research is co-ordinated. This house accommodates up to 8 interns and volunteers in 4 rooms. This house is fully equipped for self-catering, laundry, etc. and has its own computer. It is heated and is maintained by a weekly housekeeper.



Interns house is fully equipped for self-catering, laundry, etc. and has its own computer.

Your arrival and departure

You will be met at Cape Town International Airport and transferred to Gansbaai. There are direct flights from London, Amsterdam, Frankfurt, Atlanta, and Dubai. Alternatively, you can transit via Johannesburg which has flights from most major cities in Europe as well as regular connections with the US and other parts of the world including Asia and Latin America.

On arrival you will be fully briefed by a co-ordinator and you will meet the research team who will be available throughout your stay.

Health precautions

No specific vaccination or medication is needed before coming to South Africa as we are far from malaria areas and there are no strange African diseases which you could pick up (that is if you respect the same safety rules as anywhere else in the world). Tap water/fresh food and meat produce are safe for human consumption.

For more information on HIV & AIDS visit: www.aids.org.za

Cost and fees

All fees contribute to the marine research programme.

Bookings should be made at least 30 days before the programme starts. We accept interns throughout the year with participation starting on the first of each month. Bookings are for 1-3 months duration.

Please contact Tracey Fourie for the latest rates – tracey@sharkwatchsa.com

A non-refundable 50% deposit is required to confirm bookings.

The balance is payable at least 14 days prior to arrival.

Terms and conditions

Applications must be cancelled at least 30 days before the programme commences. Cancellations of less than 14 days before scheduled arrival carry a 100% cancellation fee.

Cost includes:

Transfers from and to Cape Town

Accommodation (including bedding, coffee, tea, cereals, etc.)

Internet access at Interns' house

Boat trips

Programme materials including:

2 x Marine Dynamics T-shirts

1 x Marine Dynamics cap

1 x Marine Dynamics jacket (return after completion of programme. This can be purchased at an additional cost.)

1 x pair of water boots

1 x DVD of a trip of your choice as well as a bonus promotional DVD.

Certificate of contribution towards either two blocks of sea in support of shark research, or a penguin home; when staying for more than two weeks

Certificate of completion of internship

Tour of Gansbaai and surroundings including a Township Tour as well as a visit to the famous Danger Point Lighthouse.

Cost excludes:

- Flight ticket
- Medical and travel insurance
- Excess baggage
- Use of telephone
- Food (you will need ± £200 / US\$360 / ZAR2500 per month)
- You will be responsible for purchasing your provisions and preparing your meals, except lunch on the boat, which is provided
- Lodging for the first night after arrival in Cape Town and the night before departure. We can arrange affordable lodges from £15-20 / US\$30-50 / ZAR200-350 per night).

We usually suggest a monthly budget of £125-250/ US\$215-430 for entertainment and other personal details, excluding your basic food costs.

What you need to bring?

- Towel
- Personal journal or notebook
- Camera
- Sun hat
- Sun block
- Old clothing that can be worn at sea
- Old shoes for use on the boat (water boots will be provided)
- Snorkel/mask and flippers. (We can loan or rent gear should you wish)
- Rain jacket
- Warm clothing for evenings/boat.
- Polarized sunglasses
- Necessary dive equipment for cage diving is supplied

Payment and confirmation of booking

1. After the Application is received you will receive feedback within 5 days.
2. After confirmation of approval, a 50 % deposit is required to confirm booking. The balance is due 14 days before volunteer's arrival. Payment can be made into the following bank account:
Dyer Island Conservation Trust
First National Bank, Hermanus, South Africa
Current Account
Bank Code: 200412
Zip Code: FIRNZAJJ
Account Number: 621 0020 3497
3. Confirmation of the dates and finalizing of programme dates will then be made
4. Fax/email the confirmation of payment to tracey@sharkwatchsa.com
5. Dyer Island Conservation Trust will forward an invoice for the total amount.

For further information please contact:

Tracey Fourie
Programme Coordinator
Cell: +27 82 962 7153
Tel/Fax: +27 28 384 1988
E-mail: tracey@sharkwatchsa.com
Skype: Traceyf4
Geelbek Street 5, Kleinbaai
P O Box 828, Gansbaai, 7220
South Africa
Please visit our websites
www.dict.org.za
www.sharkwatchsa.com
www.whalewatchsa.com

We look forward to welcoming you.



Dyer Island



Marine Research Internship

Research Interns will be managed by the Dyer Island Conservation Trust working with our marine eco-tourism partners, Marine Dynamics Tours and Dyer Island Cruises.

Before completing this application form please carefully review the prospectus on our website www.dict.org.za. If you have questions please contact:

Tracey Fourie – tracey@sharkwatchsa.com

All applications must be made at least two months prior to the proposed date of arrival.

Please provide the following information

PERSONAL INFORMATION

First Name

Last Name

Address

Telephone

work:

home:

mobile:

Fax

work:

home:

E-mail

work:

home:

Date of Birth

dd:

mm:

yy:

Nationality

Passport Number

Languages

PROPOSED DATES OF INTERNSHIP

Please provide your first, second, and third preferences.

1st

2nd

Note: Internships are usually for a minimum of four (4) weeks

3rd

EDUCATION

(Please attach a curriculum vitae with a minimum of two academic references. Please also include any letters of recommendation you would like to include, but this is not required.)

Current educational facility (if appropriate)

Department

Address

Qualifications (e.g. degrees, diplomas, etc.)

Current studies and year of study

Previous field experience

PERSONAL OBJECTIVES

What are your main areas of academic/research interest?

What specific research goals, if any, do you wish to achieve during your internship?

How do you intend to utilize the experience you gain during your internship towards your future career?

Will you gain any university credits for your internship? (If so, please specify)

BOOKING INFORMATION

Length of stay

Accommodation in Cape Town on arrival

Need help with accommodation?

Transport airport to accommodation

Need help with transport?

Insurance

How did you hear about us

Word of mouth

Referral

Agent

Website

Please specify
Payment method

Wire transfer /

Electronic Transfer

Credit Card Authorisation Form

PERSONAL HEALTH

What is your general health?

Do you suffer from any chronic illnesses or disabilities?

NEXT OF KIN

Name

Last Name

Postal Address

Telephone

work:

home:

mobile:

Fax

work:

home:

E-mail

work:

home:

Location

city/town:

Please return this form to:

Tracey Fourie – tracey@sharkwatchsa.com

Fax +27 28 384 2739